

(178.1); Mexico=44,807 (224.7); Venezuela=17,205 (348.5). The number of hospital deaths (CFR%) were: Argentina=2,772 (13%); Brazil=25,725 (21%); Chile=1,671 (10%); Colombia=1,622 (11%); Mexico=7,249 (16%); Venezuela=6,040 (35%). Cases of outpatient CAP (incidence) were: Argentina=19,243 (194.5); Brazil=94,448 (256.5); Chile=12,010 (291.4); Colombia=10,039 (121.6); Mexico=30,635 (153.6); Venezuela=14,339 (290.4). The percent of episodes treated as outpatient was 53% (range 45%-61%) among those aged 50-64 and 25% (range 4%-25%) among those ≥ 75 . Across countries, 51% of hospitalizations (range 42%-63%) and 69% of deaths (range 65%-72%) were in adults ≥ 75 years. **CONCLUSIONS:** CAP is a common cause of hospitalization and mortality in adults in Latin America. Incidence increases substantially with increasing age, as does the likelihood of hospitalization.

PODIUM SESSION II:

PATIENT-REPORTED OUTCOMES STUDIES

PR1

RESPONSIVENESS OF THE COPD ASSESSMENT TEST (CAT) QUESTIONNAIRE DURING EXACERBATIONS OF COPD

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OBJECTIVES: To assess the measurement properties and response to change of the Spanish version of the CAT questionnaire during exacerbations of COPD (ECOPD).

METHODS: Observational, prospective study in 49 centers in Spain. Patients hospitalized because of ECOPD (n=224) completed the CAT, the St. George's Respiratory Questionnaire-adapted for COPD (SGRQ-C) and the London Chest Activities of Daily Living (LCADL) questionnaire during the first 48 hours of admission and 4 \pm 1 weeks after hospital discharge. Another group of clinically stable COPD patients (n=153) also completed the same questionnaires on two occasions, at recruitment and 4 \pm 1 weeks later. **RESULTS:** Internal consistency (Cronbach's alpha) was 0.86. Test re-test reliability (Intraclass Correlation Coefficient) was 0.83. CAT scores correlated with both the SGRQ (r=0.82; p<0.01) and the LCADL (r=0.63; p<0.01). Change in CAT during ECOPD correlated well with change in SGRQ (r=0.63, p<0.01). The CAT discriminated between stable and ECOPD patients (15.8 vs 22.4, p<0.01), as well as between patients with different levels of airflow limitation and dyspnea (MRC scale). The effect size in CAT scores for ECOPD patients reporting their health state as "much better" after discharge was 0.90; for "quite a lot better" 0.63, and for "slightly better" 0.59. **CONCLUSIONS:** The Spanish version of CAT is sensitive to change during ECOPD and has similar properties to those of the original English version. Funded by GlaxoSmithKline.

PR2

THE BEAUTY OF MAPPING: NEED THE MEAN HEALTH-RELATED QUALITY OF LIFE SCORE FOR A GROUP OF HIP PATIENTS AND DON'T HAVE EQ-5D? JUST USE THE OXFORD HIP SCORE!

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OBJECTIVES: To assess different mapping methods for the estimation of a group's mean EQ-5D score based on responses to the Oxford Hip Score (OHS) questionnaire.

METHODS: Four models were considered: a) linear regression using total OHS as a continuous regressor; b) linear regression employing responses to the twelve OHS questions as categorical predictors; c) two-part approach combining logistic and linear regression; and d) response mapping. The models were internally validated on the estimation dataset, which included OHS and EQ-5D scores for THR, both before and six months after procedure for 1759 operations. An external validation was also performed. **RESULTS:** All models estimated the mean EQ-5D score within 0.005 of a utility, OLS continuous being the most accurate (overestimation of 0.0005 at external validation) and OLS categorical the more consistent (a maximum estimation error of 0.03 at calibration by deciles). Age, gender and deprivation did not improve the models. More accurate estimations at the individual level were achieved for higher scores of observed OHS and EQ-5D. **CONCLUSIONS:** Based on these results, when EQ-5D scores are not available, answers to the OHS questionnaire can be used to estimate a group's mean EQ-5D with a high degree of accuracy. The application of the response mapping approach allows for the mapping of OHS onto EQ-5D to be undertaken in any country where a value set is available to produce the single index EQ-5D summary score.

PR3

PRIMARY HEALTH CARE EVALUATION IN CHILE: PATIENTS' PERSPECTIVE

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BACKGROUND: Chile's health indicators are good compared with other Latin American countries with similar gross national product. Nonetheless, disparities in health care services are not absent in Chile. **OBJECTIVES:** The aim of this study was to evaluate satisfaction with primary health care and health-related Quality of Life (hrQoL) between patients in urban and rural areas of Chile. **METHODS:** A national-representative sample of 1544 patients was surveyed at 38 primary care centers. The "Encuesta de expectativas, percepción y satisfacción usuaria con modelo de salud familiar" (survey of patient expectations, perception and satisfaction with the family health model) and the EQ-5D questionnaire were administered to assess patient satisfaction level, and self-evaluated health, respectively. Using the Chilean social value for reported health states, a mathematic equation was

used to compute the average hrQoL. **RESULTS:** Patient satisfaction was 5.28 \pm 0.30 (scale 1 to 7). There was a statistically significant difference between urban and rural areas (5.45 \pm 1.06 and 5.10 \pm 1.28 points, respectively). The mean hrQoL for the entire population was 0.77 \pm 0.00 (scale 0 to 1), with a statistical significant difference between rural and urban areas (0.78 \pm 0.24 and 0.75 \pm 0.25, respectively). Using stepwise multivariate regression we were able to explain 25.4% (R²=0.254) of the variability in patient satisfaction. Length of consultation with the health care professional (Beta = 0.215, p value <0.001), patient education level (Beta = -0.115, p value = 0.006), and year in which the center was founded (Beta = 0.089, p value = 0.025) were identified as explanatory variables. **CONCLUSIONS:** Despite evaluating better-perceived quality of health services, urban patients rated lower their self-assessed health. These results should motivate policy makers in looking for innovative ways to diminish the gap in quality between urban and rural areas.

PR4

CALIDAD DE VIDA Y VICTIMIZACIÓN EN ADOLESCENTES ESTUDIANTES DE MÉXICO

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OBJETIVOS: Analizar la calidad de vida (CV) de adolescentes estudiantes de secundaria de Jalisco México acorde a la percepción de ser víctima de alguna agresión, intimidación o maltrato. **METODOLOGÍAS:** Estudio transversal analítico llevado a cabo en 2010 con 570 adolescentes estudiantes de nueve secundarias de Jalisco, México (11-17 años, media 13.3, 47.2% mujeres, 20% trabajaban, 1er grado 31%, 2do. 23.1%, 3ro. 44.3%), contestaron un instrumento en línea que incluyó el módulo perceptual del Quality of Life Instrument-research (YQOL-R) en español, 4 ítems sobre violencia del Youth Risk Behavior Survey 2007 y un ítem del módulo contextual del YQOL-R. Estadísticas: t de student, analizado con SPSS 17. Ética: consentimiento informado, voluntario, privado y confidencial. **RESULTADOS:** Un total de 17.1% no fueron a la escuela los pasados 30 días, por sentirse que podrían estar inseguros en la escuela o en el camino para llegar a ella, a 12.4% los trató de lastimar alguien con un arma en la escuela en los pasados 12 meses, 22.1% maltratados en la escuela, 22.6% maltratados electrónicamente (maltratados o intimidados por email, chat, mensajes, páginas web) y 26.6% durante las últimas 4 semanas los hicieron sentirse rechazado/a por su apariencia, personas de su edad. La CV fue significativamente menor para los que no fueron a la escuela por sentirse inseguros (p<0.001), en quienes trataron de lastimar con un arma en la escuela (p=0.37), quienes fueron maltratados en la escuela (p<0.001), quienes fueron maltratados electrónicamente (p=0.047) y quienes se sintieron rechazados por su apariencia (p<0.001). **CONCLUSIONES:** En estudiantes de secundaria ser víctima de maltrato y agresión está asociado con menor CV total. Es fundamental la elaboración de programas de intervención en este nivel que garanticen escuelas más seguras en su interior y alrededores para mejorar la CV de los adolescentes.

PODIUM SESSION II:

RESEARCH ON METHODS

RM1

COMPARING THE USE OF DYNAMIC AND STATIC INFECTIOUS DISEASE MODELS IN LATIN AMERICA WITH NORTH AMERICA, EUROPE, ASIA AND OTHER REGIONS.

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OBJECTIVES: To establish whether there are differences in the type of methodology (static or dynamic) used to assess the cost-effectiveness of vaccination programmes between Latin America and other regions of the world. **METHODS:** A systematic review from 1950 to 2010 of the cost-effectiveness of vaccine interventions was performed. Modelling methodologies were categorised as static where the number infected was not related to the number infectious, and where herd immunity (an immunity that occurs when the vaccinated proportion of the population provides protection to unprotected individuals) was not incorporated. Models were categorised as dynamic otherwise. Static models were sub-classified into Decision trees (DT) and static Markov models (sMM); dynamic models were sub-classified into dynamic Markov models (dMM), System dynamics including Susceptible, Exposed, Immune and Recovered models (SD), Discrete event simulation (DES) and Agent-based models (ABM). **RESULTS:** A total of 310 relevant studies were found. 251 (81%) adopted a static approach (131 sMM and 120 DT) whilst 59 (19%) used a dynamic approach (52 SD, 3 DES, 3 ABM and 1 dMM). The majority of papers were set in Europe (120, 39%) and North America (97, 31%), with 26 (8%) in Latin America, 37 (12%) in Asia and 30 (10%) in other regions. The proportion of models that were dynamic within Latin America (23%) compared favourably with North America (15%), Europe (26%), Asia (8%) and the remaining regions (15%). However, two of the six dynamic studies undertaken in Latin America used modellers based in Europe or North America. **CONCLUSIONS:** Despite the limitations associated with static models these are more prevalent than dynamic methodologies when modelling the cost-effectiveness of vaccine interventions. This conclusion was applicable to all regions, with the results for Latin America comparable with other regions. This systematic review suggests that worldwide education of researchers in the advantages of dynamic methodologies is needed.

RM2

APLICACION DE MODELOS DE REGRESION CON STATA PARA EL ESTUDIO DEL CONSUMO DE RECURSOS EN UNIDADES DE CUIDADOS INTENSIVOS NEONATALES

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